[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-0888; Project Identifier MCAI-2021-01211-R]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to supersede Airworthiness Directive (AD) 2021-10-10, which applies to all Airbus Helicopters Model SA330J helicopters. AD 2021-10-10 requires repetitively inspecting the main gearbox (MGB) particle detector and the MGB bottom housing (oil sump) for metal particles, analyzing any metal particles that are found, and replacing the MGB if necessary. Since the FAA issued AD 2021-10-10, additional review concluded that installing an improved planet gear assembly is necessary. This proposed AD would continue to require repetitively inspecting the MGB particle detector and the MGB bottom housing (oil sump) for metal particles, and analyzing any metal particles that are found, and would also require replacing the planet gear assembly and repetitively inspecting and establishing an airworthiness limitation for that assembly as specified in a European Union Aviation Safety Agency (EASA) AD, which is proposed for incorporation by reference (IBR). The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

• Federal eRulemaking Portal: Go to https://www.regulations.gov. Follow the instructions for submitting comments.

• Fax: (202) 493-2251.

• Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

• Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For EASA material that is proposed for IBR in this NPRM, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: ADs@easa.europa.eu; internet: www.easa.europa.eu. You may find the EASA material on the EASA website at https://ad.easa.europa.eu. For Airbus Helicopters service information identified in this NPRM, contact Airbus Helicopters, 2701 North Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at https://www.airbus.com/helicopters/services/technical-support.html. You may view this material at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110. The EASA material is also available at https://www.regulations.gov by searching for and locating Docket No. FAA-2022-0888.

Examining the AD Docket

You may examine the AD docket at https://www.regulations.gov by searching for and locating Docket No. FAA-2022-0888; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the EASA AD, any comments received, and other information. The street address for Docket Operations is listed above.

FOR FURTHER INFORMATION CONTACT: Mahmood G. Shah, Aviation Safety Engineer, Fort Worth ACO Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; phone: 817-222-5538; email: mahmood.g.shah@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include

"Docket No. FAA-2022-0888; Project Identifier MCAI-2021-01211-R" at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to https://www.regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as "PROPIN." The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Mahmood G. Shah, Aviation Safety Engineer, Fort Worth ACO Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; phone: 817-222-5538; email: mahmood.g.shah@faa.gov. Any commentary that the FAA receives that is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

The FAA issued AD 2021-10-10, Amendment 39-21543 (86 FR 27271, May 20, 2021) (AD 2021-10-10), for all Airbus Helicopters Model SA330J helicopters. AD 2021-10-10 requires repetitively inspecting the MGB particle detector and the MGB bottom housing (oil sump) for metal particles, analyzing any metal particles that are found, and replacement of the MGB if necessary. The FAA issued AD 2021-10-10 to address the

unsafe condition on these products. AD 2021-10-10 was prompted by EASA AD 2018-0272, dated December 13, 2018 (EASA AD 2018-0272) to correct an unsafe condition for all Airbus Helicopters Model SA330J helicopters.

Actions Since AD 2021-10-10 Was Issued

Since the FAA issued AD 2021-10-10, EASA, which is the Technical Agent for the Member States of the European Union, has issued superseding EASA AD 2021-0239, dated November 5, 2021 (EASA AD 2021-0239), to correct an unsafe condition for all Airbus Helicopters Model SA330J helicopters.

This proposed AD was prompted by additional review accomplished by Airbus Helicopters that concluded that replacing the second stage planet gear assembly with a new and improved second stage planet gear assembly part number (P/N) 330A32-9861-02 (modification (mod) 0751091) is necessary in order to further improve the level of safety of the fleet. The FAA is proposing this AD to address failure of an MGB second stage planet gear, which could result in failure of the MGB and subsequent loss of control of the helicopter. See EASA AD 2021-0239 for additional background information.

Related Service Information Under 1 CFR Part 51

EASA AD 2021-0239 supersedes EASA AD 2018-0272 and continues to require repetitively inspecting the MGB particle detector and the MGB bottom housing (oil sump) for metal particles, and analyzing any metal particles that are found. EASA AD 2021-0239 also requires installing an MGB equipped with a new second-stage planet gear assembly P/N 330A32-9861-02 (mod 0751091) or modifying an affected MGB by having the second stage planet gear assembly replaced by an Airbus Helicopter qualified technician; and extends the compliance time for the repetitive MGB bottom housing (oil sump) inspections and establishes a life limit for post-mod 0751091 helicopters.

This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Other Related Service Information

The FAA reviewed Airbus Helicopters Alert Service Bulletin (ASB) No. SA330-05.103, Revision 3, dated October 4, 2021. This service information specifies procedures

for checking (inspecting) the MGB particle detector and the bottom housing (oil sump) to ensure that there are no particles, and for particle analysis.

The FAA also reviewed Airbus Helicopters ASB No. SA330-65.139, Revision 0, dated October 4, 2021 (ASB SA330-65.139). This service information specifies procedures for installing an MGB equipped with a new second-stage planet gear assembly P/N 330A32-9861-02 (mod 0751091) and the alternate action of having the second stage planet gear assembly replaced by an Airbus Helicopters qualified technician. The new second stage planet gear assembly has improved stress and fatigue characteristics. ASB SA330-65.139 also establishes an airworthiness limitation of 2,750 flight hours for all post mod 0751091 planet gear assemblies.

FAA's Determination

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA about the unsafe condition described in its AD. The FAA is proposing this AD after evaluating all known relevant information and determining that the unsafe condition described previously is likely to exist or develop on other helicopters of the same type design.

Explanation of Retained Requirements

Although this proposed AD does not explicitly restate the requirements of AD 2021-10-10, this proposed AD would retain all of the requirements of AD 2021-10-10. Those requirements are referenced in EASA AD 2021-0239, which, in turn, is referenced in paragraph (g) of this proposed AD.

Proposed AD Requirements in this NPRM

This proposed AD would require accomplishing the actions specified in EASA AD 2021-0239, described previously, as incorporated by reference, except for any differences identified as exceptions in the regulatory text of this proposed AD and except as discussed under "Differences Between this Proposed AD and the EASA AD."

Explanation of Required Compliance Information

In the FAA's ongoing efforts to improve the efficiency of the AD process, the FAA developed a process to use some civil aviation authority (CAA) ADs as the primary

source of information for compliance with requirements for corresponding FAA ADs. The FAA has been coordinating this process with manufacturers and CAAs. As a result, the FAA proposes to incorporate EASA AD 2021-0239 by reference in the FAA final rule. This proposed AD would, therefore, require compliance with EASA AD 2021-0239 in its entirety through that incorporation, except for any differences identified as exceptions in the regulatory text of this proposed AD. Using common terms that are the same as the heading of a particular section in EASA AD 2021-0239 does not mean that operators need comply only with that section. For example, where the AD requirement refers to "all required actions and compliance times," compliance with this AD requirement is not limited to the section titled "Required Action(s) and Compliance Time(s)" in EASA AD 2021-0239. Service information referenced in EASA AD 2021-0239 for compliance will be available at https://www.regulations.gov by searching for and locating Docket No. FAA-2022-0888 after the FAA final rule is published.

Differences Between this Proposed AD and the EASA AD

EASA AD 2021-0239 requires certain actions be done after the last flight of the day or "ALF," whereas this proposed AD would require doing those actions before the first flight of the day. EASA AD 2021-0239 requires contacting the manufacturer if unsure about the characterization of the particles collected, whereas this proposed AD would not. If there are any 16NCD13 particles, EASA AD 2021-0239 requires contacting the manufacturer and sending a 1-liter sample of oil to the manufacturer, whereas this proposed AD would not. EASA AD 2021-0239 requires returning certain parts to the manufacturer, whereas this proposed AD would not. EASA AD 2021-0239 allows the option of modifying an affected MGB by having the second stage planet gear assembly replaced by an Airbus Helicopters qualified technician, whereas this proposed AD would allow that modification with certain approvals instead. EASA AD 2021-0239 allows different methods to accomplish the oil sump inspection, whereas this proposed AD would require a certain method. EASA AD 2021-0239 requires discarding certain parts, whereas this proposed AD would require removing those parts from service instead.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 15 helicopters of U.S. Registry. Labor rates are estimated at $85 per work-hour. Based on these numbers, the FAA estimates the following costs to comply with this proposed AD.

Inspecting the MGB particle detector would take about 0.25 work-hour for an estimated cost of $21 per helicopter and $315 for the U.S. fleet, per inspection cycle. Inspecting the MGB bottom housing (oil sump) would take up to about 4 work-hours for an estimated cost of $340 per helicopter and $5,100 for the U.S. fleet, per inspection cycle.

Replacing a second stage planet gear assembly would take about 100 work-hours and parts would cost about $121,140 for an estimated cost of $129,640 per helicopter and $1,944,600 for the U.S. fleet, per replacement cycle. Alternatively, replacing an MGB would take about 100 work-hours and parts would cost about $600,000 (overhauled) for an estimated cost of $608,500 per helicopter.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national

Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Would not affect intrastate aviation in Alaska, and

(3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by:

a. Removing Airworthiness Directive 2021-10-10, Amendment 39-21543 (86 FR 27271, May 20, 2021); and

b. Adding the following new airworthiness directive:

Airbus Helicopters: Docket No. FAA-2022-0888; Project Identifier MCAI-2021-01211-R.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2021-10-10, Amendment 39-21543 (86 FR 27271, May 20, 2021).

(c) Applicability

This AD applies to all Airbus Helicopters Model SA330J helicopters, certificated in any category.

(d) Subject

Joint Aircraft Service Component (JASC) Code: 6320, Main Rotor Gearbox.

(e) Unsafe Condition

This AD was prompted by a failure of a second stage planet gear installed in the main gearbox (MGB). The FAA is issuing this AD to address failure of an MGB second stage planet gear, which could result in failure of the MGB and subsequent loss of control of the helicopter.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Requirements

Except as specified in paragraphs (h) and (i) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency (EASA) AD 2021-0239, dated November 5, 2021 (EASA AD 2021-0239).

(h) Exceptions to EASA AD 2021-0239

(1) Where EASA AD 2021-0239 refers to its effective date, this AD requires using the effective date of this AD.

(2) Where EASA AD 2021-0239 refers to March 30, 2018 (the effective date of EASA AD 2018-0065, dated March 23, 2018), this AD requires using the effective date of this AD.

(3) Where EASA AD 2021-0239 refers to December 27, 2018 (the effective date of EASA AD 2018-0272, dated December 13, 2018), this AD requires using the effective date of this AD.

(4) Where EASA AD 2021-0239 refers to flight hours (FH), this AD requires using hours time-in-service (TIS).

(5) Where EASA AD 2021-0239 specifies actions be done after the last flight of the day or “ALF,” this AD requires doing those actions before the first flight of the day.

(6) Where paragraph (1) of EASA AD 2021-0239 specifies to inspect the MGB particle detector "in accordance with the instructions of Section 3 of the inspection ASB" for this AD replace that phrase with "by following the Accomplishment Instructions, paragraph 3.B.2.a., of the inspection ASB."

(7) Where paragraph (2) of EASA AD 2021-0239 specifies to inspect the MGB bottom housing (oil sump) "in accordance with the instructions of Section 3 of the inspection ASB" for this AD replace that phrase with "by following the Accomplishment Instructions, paragraph 3.B.2.b. of the inspection ASB."

(8) Where the service information referenced in EASA AD 2021-0239 specifies to perform a metallurgical analysis and contact the manufacturer if unsure about the characterization of the particles collected, this AD does not require contacting the manufacturer to determine the characterization of the particles collected.

(9) Although the service information referenced in EASA AD 2021-0239 specifies that if any 16NCD13 particles are found to contact the manufacturer and send a 1-liter sample of oil to the manufacturer, this AD does not require that action.

(10) Although the service information referenced in EASA AD 2021-0239 specifies returning certain parts to the manufacturer, this AD does not require that action.

(11) Where paragraph (5) of EASA AD 2021-0239 allows modifying an affected MGB by having the second stage planet gear assembly replaced by an Airbus Helicopters qualified technician, this AD does not allow that action; instead of that action, this AD allows modifying an affected MGB in accordance with a method approved by the Manager, General Aviation & Rotorcraft Section, International Validation Branch, FAA; or EASA; or Airbus Helicopters EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(12) Although the service information referenced in EASA AD 2021-0239 specifies discarding certain parts, this AD requires removing the parts from service.

(13) The "Remarks" section of EASA AD 2021-0239 does not apply to this AD.

(i) No Reporting Requirement

Although the service information referenced in EASA AD 2021-0239 specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(j) Special Flight Permit

Special flight permits may be issued in accordance with 14 CFR 21.197 and 21.199 to operate the helicopter to a location where the helicopter can be modified, provided that the helicopter is operated during the day, under visual flight rules, and with no passengers onboard.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (l)(2) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(l) Related Information

(1) For EASA AD 2021-0239, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find the EASA material on the EASA website at https://ad.easa.europa.eu. You may view this material at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110. This material may be found in the AD docket at https://www.regulations.gov by searching for and locating Docket No. FAA-2022-0888.

(2) For more information about this AD, contact Mahmood G. Shah, Aviation Safety Engineer, Fort Worth ACO Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; phone: 817-222-5538; email: mahmood.g.shah@faa.gov.

Issued on July 17, 2022.

Christina Underwood, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.
[FR Doc. 2022-15578 Filed: 7/20/2022 8:45 am; Publication Date: 7/21/2022]